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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,383	09/16/2003	Kevin David Safford	10992435-3	2164

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EXAMINER	
CHU, GABRIEL L	
ART UNIT	**PAPER NUMBER**
2114	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,383	SAFFORD ET AL.	
	Examiner	Art Unit	
	Gabriel L. Chu	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 4 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. **Claims 1, 3, 6, 7, 9-14 rejected under 35 U.S.C. 103(a) as being unpatentable over US 4887203 to MacGregor et al. in view of US 5155819 to Watkins et al.** See previous office action.

3. **Claims 2, 8 rejected under 35 U.S.C. 103(a) as being unpatentable over US 4887203 to MacGregor et al. in view of US 5155819 to Watkins et al. as applied to claim 1, 7 above, and further in view of US 5133077 to Karne et al.** See previous office action.

4. **Claims 4, 5 rejected under 35 U.S.C. 103(a) as being unpatentable over US 4887203 to MacGregor et al. in view of US 5155819 to Watkins et al. as applied to claim 1 above, and further in view of US 6112312 to Parker.** See previous office action.

Response to Arguments

5. **Applicant's arguments filed 12 April 2006 have been fully considered but they are not persuasive.** Regarding Applicant's argument (page 5) that "MacGregor has never mentioned anything about reprogramming the microcode and there is no need in MacGregor's invention to reprogram the special microcoded routines", had MacGregor specifically mentioned these things, the MacGregor reference would have been applied under 102.

Regarding Applicant's note (page 5) that "Accordingly, the test microcode in these 'special microcoded routine' are pre-programmed, not reprogrammed in the processor", Applicant has apparently noted a summary of MacGregor absent of the teachings of Watkins.

Subsequently, Applicant states (page 6) "the purported motivation to combine is not found in the part art references, as required by MPEP 2143". This is a clear misrepresentation of what is stated in the MPEP, recited herein for Applicant's convenience, MPEP 2143.01, "There are three possible sources for motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." Clearly, Applicant's understanding only forms a portion of what is actually permitted.

Regardless, Examiner has provided a motivation to combine from the prior art. From the rejection, a person of ordinary skill in the art at the time of the invention would have been motivated to reprogram microcode because, from line 58 of column 2 of Watkins, "Significant flexibility is provided with respect to the definition of the macroinstruction set itself. Because the chip is not littered with dedicated "glue" logic designed to optimize a particular set of predetermined macroinstructions, individual macroinstructions can be modified solely by rewriting microcode. Instruction decoding and execution time can also be modified in this manner.", and further from the abstract of MacGregor, "By way of this instruction, the processor may be directed to execute special microcoded routines otherwise unavailable during normal execution." Applicant's argument regarding motivation appears to be that Applicant does not find the portion

cited form MacGregor sufficient to meet Applicant's requirements for obviousness, which is not the bar that Examiner must meet.

Regarding Applicant's demand (page 6) for a reasonable expectation of success, MPEP 2143.02 states that obviousness requires only a reasonable expectation of success, and further, that **Applicants** may present **evidence** showing there was no reasonable expectation of success. Applicant then notes that "Watkins' chip is reprogrammable because it is not littered with dedicated 'glue' logic designed to optimize a particular set of predetermined macroinstructions" and that "MacGregor is silent as to whether its processor contains any 'glue' logic." Examiner notes that Applicant has identified specific embodiments of either reference but has not provided any evidence that such a combination would not yield a reasonable expectation of success. Nor does Applicant necessarily state that such a combination would not reasonably succeed, but merely demands that such be provided.

In response to applicant's argument that the combination of MacGregor and Watkins *may* not succeed and applicant's allegation that the combination is not properly motivated, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). MacGregor has disclosed a microcoded data processor with an instruction that allows a processor to execute special microcoded routines such as

those used for testing. Watkins has disclosed user-defined dedicated functions and instructions fetched externally or from an optional PROM with data fetched externally or internally, which allows, from line 58 of column 2 of Watkins, "Significant flexibility is provided with respect to the definition of the macroinstruction set itself." A person having ordinary skill in the art at the time of the invention would have realized that MacGregor's test system would be made more flexible by allowing reprogrammability. In the field of testing, this is particularly useful because testing is a process in which there is frequently and usually several iterations required.

Regarding Applicant's argument (page 6) that "MacGregor is directed to a designated set of microinstructions" but not an "arbitrary set of microinstructions", MacGregor clearly "arbitrates" what is "designated". Further, in view of Watkins, this set of microinstructions is "arbitrated" by a user ("user-defined"). It is not clear how Applicant intends to differentiate "arbitration" over "designation" (or over "user-definition"). Regardless, such a use of terminology is not patentably distinguishing.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (571) 272-3656. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gc

SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER